

OGL/WQ/WT Standard Operating Procedures

SOP #16 – AGRICULTURAL COMPLIANCE INSPECTIONS & COMPLAINT RESPONSE FOR MANURE AND PROCESS WASTEWATER DISCHARGES

Purpose:

To ensure statewide program consistency as it relates to agricultural compliance inspections and complaint responses for manure and process wastewater including safety protocols, inspection requirements, and documentation. This applies to all inspections, meetings, and complaint/spill response related to small, medium, and large farms - including crop producers.

Activity:

Conducting inspections for small, medium and large farms and crop producers for compliance with agricultural performance standards and prohibitions, notices of discharge, and/or WPDES permit conditions. This may include pre and post grant implementation checks, permit compliance inspections, new permit walk-overs, construction checks, complaint response, and other site inspection purposes.

Physical Settings:

Farm production sites, agricultural fields, construction sites, residential properties, streams, rivers, lakes, wetlands.

Possible Hazards:

Hazards involved with field work include but are not limited to: moving farm and construction equipment/machinery; road traffic; sun/heat exposure; cold exposure; close proximity to large animal activity; insect/tick bites; skin exposure to poisonous plants; slips/trips/falls due to slippery or rough terrain; dust/particulate exposure; etc.

Prohibited Activities:

Any activity that puts you at risk of injury shall not be conducted; staff shall wear appropriate personal protective equipment to reduce risk during field inspections.

Safety Requirements:

Required Training

- Completion of [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/safety/index.html>"], including completion of a First Aid/CPR class.
- Working near water is considered a potentially hazardous activity. Read [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/safety/index.html>"] and follow all required elements.
- Read [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/safety/index.html>"] and follow all required elements when working alone or in a dangerous or hazardous site

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- Read the Cold Weather Handbook[[HYPERLINK "http://intranet.dnr.state.wi.us/int/mb/handbooks/91811/9181.1.pdf"](http://intranet.dnr.state.wi.us/int/mb/handbooks/91811/9181.1.pdf)], and know the following:
 - Proper clothing and equipment.
 - Safe work practices.
 - Guidelines for eating and drinking.
 - Risk factors that increase the health effects of cold exposure.
 - How to recognize signs and symptoms of frostbite.
 - How to recognize signs and symptoms of hypothermia.
 - Appropriate first aid treatment, including re-warming procedures.
- Read the Biosecurity Precautions When Visiting or Inspecting Livestock/Poultry Operations, [[HYPERLINK "http://intranet.dnr.state.wi.us/int/mb/codes/MC3431-10.pdf"](http://intranet.dnr.state.wi.us/int/mb/codes/MC3431-10.pdf)], and follow all required elements.
- Read SOP #11 – Disinfection ([[HYPERLINK "http://intranet.dnr.state.wi.us/int/mb/codes/MC9183-1.pdf"](http://intranet.dnr.state.wi.us/int/mb/codes/MC9183-1.pdf)]) and SOP #12 Hazard Communications ([[HYPERLINK "http://intranet.dnr.state.wi.us/int/water/safety/index.html"](http://intranet.dnr.state.wi.us/int/water/safety/index.html)])). Do not handle disinfection chemicals unless you have read the Materials Safety Data Sheet (MSDS). The most commonly used chemical for agricultural inspection work is diluted bleach as part of the biosecurity requirements to sanitize work boots. Staff do not need to complete the 5-hour hazard communication training unless they will be in contact with or using other chemicals as part of their daily field work.
 - **Disinfection Chemicals MSDS:**
 - Sodium hypochlorite (4-6% solution): [[HYPERLINK "http://avogadro.chem.iastate.edu/MSDS/NaOCl-6pct.htm"](http://avogadro.chem.iastate.edu/MSDS/NaOCl-6pct.htm)]
 - Follow dilution procedures in the Biosecurity Manual Code. Mixing of disinfection chemicals should be conducted in a well-ventilated area with access to eye wash facilities (i.e. laboratory spaces).
 - Concentrated disinfection chemicals are not allowed in state vehicles. Only transport diluted solutions.

NOTE: The Biosecurity Manual Code allows for the use of disposable boots as an alternative to rubber boots and disinfection.

Other Suggested/Recommended Training

- [[HYPERLINK "http://dnrmedia.wi.gov/main/Play/bdc5af71855047ac9cabe8f4db9395b1"](http://dnrmedia.wi.gov/main/Play/bdc5af71855047ac9cabe8f4db9395b1)]
- Inspection Authority and Trespassing – [[HYPERLINK "http://intranet.dnr.state.wi.us/int/E-Enforcement/environmentalEnforceDocs/InspAuth.doc"](http://intranet.dnr.state.wi.us/int/E-Enforcement/environmentalEnforceDocs/InspAuth.doc)] and [[HYPERLINK "http://dnrmedia.wi.gov/main/Play/44783c0662fd4f8984718ce96d6bdc651d"](http://dnrmedia.wi.gov/main/Play/44783c0662fd4f8984718ce96d6bdc651d)]
- [[HYPERLINK "http://intranet.dnr.state.wi.us/int/E-Enforcement/environmentalEnforceDocs/PublicAccessFactSheet.pdf"](http://intranet.dnr.state.wi.us/int/E-Enforcement/environmentalEnforceDocs/PublicAccessFactSheet.pdf)]
[[HYPERLINK "http://intranet.dnr.state.wi.us/int/E-Enforcement/environmentalEnforceDocs/GuidetoWaterRightsRegulations.pdf"](http://intranet.dnr.state.wi.us/int/E-Enforcement/environmentalEnforceDocs/GuidetoWaterRightsRegulations.pdf)]

Site Safety Plan

A site safety plan is required for employees working alone in a remote area. Follow the procedures of SOP #3 and complete the [[HYPERLINK "http://intranet.dnr.state.wi.us/int/water/safety/index.html"](http://intranet.dnr.state.wi.us/int/water/safety/index.html)].

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Support Staff

A second field person is recommended to attend when conducting inspection work in remote locations or potentially hostile situations.

Comply with Other SOPs

- SOP #1 – [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/safety/index.html>"]
- SOP #2 – [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/safety/index.html>"]
- SOP #3 – [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/safety/index.html>"]

Personal Protective Equipment (PPE)/Gear

- Wear/bring appropriate identification (i.e. department issued ID badge, nametag, and business cards).
- Follow the requirements of [HYPERLINK "<http://intranet.dnr.state.wi.us/int/mb/handbooks/91811/9181.1.pdf>"] regarding cold weather protection including: wearing appropriate clothing, footwear, face and eye protection; and using engineering controls.
- Wear traffic vests when conducting inspection activities along roadways or construction sites.
- Wear appropriate footwear (i.e. rubber boots, protective toe boots, etc.).
- Wear adequate protective clothing to prevent over-exposure to sun, cold and/or wet conditions.
- Use sun screen, bug repellant, wear sunglasses and drink plenty of water to avoid dehydration.

Required Equipment

- First aid kit; department pool vehicles are typically stocked with kits.
- Employees shall have an operational communication device (cell phone or portable radio) for requesting emergency medical services (EMS) in the event of an emergency; other types of emergency contacts; or contacting operators, landowners, consultants, county staff, department staff or other operator/landowner designees.
- Rubber field boots and/or steel toe boots.
- Digital camera with carrying case, extra batteries, and battery charger (if necessary).
- County plat books, gazetteer, or other mapping tools.
- Sampling kit(s).
- Shovel, soil sample probe or, hand auger, etc.
- Bleach (or other disinfectant) in accordance with the Biosecurity Manual Code (MC 3431.1).
- P-card (with supervisor's approval).

Recommended Equipment

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- Biodegradable hand soap or antibacterial wipes.
- Rain gear (i.e. coat and pants).
- Winter gear (i.e. coat, pants, gloves, hat).
- Range finder, clinometer.
- Long tape measure.

Procedures to Perform Activities:

Office Activities – Safety

- Review the “Fieldwork Exposures and Injury Prevention” required training topics in [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/safety/index.html>"] for additional information.
- Review the safety requirements in [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/safety/index.html>"]. Update Outlook calendar and follow office activities and field activities identified in SOP #2.
- Complete the [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/safety/index.html>"] as required by SOP #3 if you are working alone in a remote area.
- Check local weather stations for any predicted changes in weather conditions, temperature and wind speed. Use: [HYPERLINK "http://weather.noaa.gov/weather/WI_cc_us.html?_sm_au_=iHV7RVJbqJk47HP5"]. A wind chill calculator is located at [HYPERLINK "<http://www.nws.noaa.gov/om/windchill>"].
- Review biosecurity manual code.
- Inspect all personal protective gear/equipment for wear and tear to ensure operability.

Office Activities – Field Preparation

- Review facility file, WPDES permit, or grant requirements.
- Review aerial photos using appropriate on-line mapping tools (i.e. Surface Water Data Viewer, [HYPERLINK "<http://intranet.dnr.state.wi.us/int/water/dwg/mapViewers/>"], county land information systems, Google Earth, etc.)
- Evaluate weather conditions (i.e. frozen, snow covered, recent rainfall, predicted rainfall, etc.) that could impact site conditions and potential for discharge events or compliance issues.
- Prepare equipment including boots, site maps, checklists, camera, contact numbers, etc.
- Arrange the inspection with the landowner, operator, permittee and/or designee. Consider inviting county land conservation staff, DATCP staff, agronomist and/or private

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engineer to the inspection as needed. See inspection authorities below. Be sure to document that permission to access the property has been obtained.

Inspection Authorities:

- Inspection authorities and warrants are outlined in [[HYPERLINK "http://intranet.dnr.state.wi.us/int/mb/codes/MC4191-50.pdf"](http://intranet.dnr.state.wi.us/int/mb/codes/MC4191-50.pdf)]. If access is denied for inspections, document the interaction and work through the process outlined in the manual code. **Department staff are not authorized to trespass on private property so ensure proper notification and access has been granted and documented.**
 - Inspection authority for ***permitted operations*** is addressed in s. 283.55(2), Wis. Stats.
 - *For production sites*, staff should obtain permission from the permittee or their designee to access the property for an inspection. Approval to access the property should be documented in accordance with the documentation guidance.
 - *For land application sites (owned or rented) that are included in a department approved nutrient management plan and covered under the WPDES permit*, permission to access the property can be obtained from the permittee or their designee. Staff should confirm with the permittee that the landowner is aware of the activities and will not have concerns with department staff accessing the property. See documentation guidance on suggested language to document approval to access has been obtained.
 - *If a land application site is not included in a department approved nutrient management plan*, it is not covered by the WPDES permit and inspection authorities under s. 283, Wis. Stats. Obtain permission from the landowner before accessing the property. If the landowner is not available, contact the local warden or county land conservation department for assistance. Wardens and county staff are covered under different inspection authorities and may be able to access the property. Staff are not covered under these authorities and should not accompany wardens to county staff without appropriate landowner permission. Rather, staff can document concerns from the public right of way.
 - Inspection authority for ***non-permitted operations*** is addressed in s. 281.97, Wis. Stats.
 - *For production sites*, staff should obtain permission from the owner of the operation or their designee. Approval to access the property should be documented in accordance with the documentation guidance.
 - *For land applications sites (owner or rented) associated with non-permitted farms*, a number of factors need to be considered and documented before accessing the site:
 1. *Is the source of the manure/process wastewater known?*
 - **Yes:** Obtain permission to access properties owned by the operation from the owner of the operation or their designee. See (2) for rented land.

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- **No:** Use various resources to try to determine the source of the manure/process wastewater (i.e. contact county land conservation department, use county land records data on-line or from plat maps, etc.) See (2) for additional considerations.
2. *Does the operation have a nutrient management plan?*
- **Yes:** Obtain and document permission to access owned or rented property similar to permitted operations (above).
 - **No:** Obtain and document permission to access the property from the landowner. If contact is not feasible with the landowner, contact the local warden or local county land conservation department for assistance or document from the public right of way. Wardens and county staff are covered under different authorities for accessing properties. These authorities do not cover staff access so staff should not accompany wardens or county staff when they are exercising their inspection authorities.
- Inspection authority in which the owner or operator cannot be reached to obtain permission to access the property. If there is a case where the owner or operator is unknown or cannot be located and there are active emergencies discharges occurring, staff should immediately contact the warden for emergency access procedures. (These procedures are primarily through spills law and may also involve contacting the regional spills coordinator; however, staff should work with the warden in these cases.) For chronic (ongoing) discharges, staff should work with enforcement staff to obtain the appropriate inspection warrant documentation while continuing to try to make contact or determine the identity of the owner or operator.
 - Staff should also be aware of the Castle Doctrine and how it impacts permission to access private property.

IF A STAFF PERSON FEELS UNCOMFORTABLE OR UNSURE THAT CONDITIONS ARE SAFE AT AN INSPECTION SITE, INSPECTION SHOULD NOT BE ATTEMPTED. NOTIFY SUPERVISOR OF UNSAFE CONDITIONS.

Field Activities

Be aware of changing weather conditions and leave open areas immediately if severe weather or lightning is imminent.

Be aware of construction equipment, production site/land application vehicle traffic, and animals (i.e. cows, dogs, horses, pigs, llamas, chickens, turkeys, etc.)

Wear appropriate safety equipment (i.e. rubber boots, safety vests, hard hat if construction site, etc.).

1. Production Site Inspections

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- Initiate inspection by meeting with the landowner, operator, permittee and/or designee. Explain what the inspection will entail, areas to be covered, and the timeline for follow-up communication. Discuss any biosecurity procedures in accordance with manual code.
- Review any necessary paperwork with the landowner, operator, permittee and/or designee. Paperwork may include: nutrient management plans, spreading records, engineering/construction plans, monitoring inspection records, spill response plan, size of operation and other documentation based on the purpose of the inspection.
- Conduct site walkover paying close attention to areas of potential discharge of manure and/or process wastewater (to surface or groundwater). Remember to walk completely around all sides of structures and follow flow paths. These areas may include:
 - manure storage facilities (solid and liquid), reception tanks, transfer systems, temporary manure stacking areas, manure stacking pads, sand settling lanes, separator systems, digesters and other alternative manure/process wastewater treatment systems;
 - feed storage areas and associated runoff controls/collection systems;
 - barnyards, feedlots, pastures, outdoor exercise lots, winter grazing areas, CAFO vegetated areas, calf hutches, animal walkways, and other areas where animals may be kept outdoors;
 - milkhouse waste and process wastewater collection and storage systems;
 - vegetated treatment areas, filter strips and buffers;
 - storm water treatment areas and clean water diversions.
- Document status of structures and site conditions by taking photographs in accordance with compliance photography training. If necessary, collect water samples in accordance with [HYPERLINK "http://intranet.dnr.state.wi.us/int/aw/rr/team_pages/spill_team/organic-waste-guidance.pdf"]. When determining discharges of manure or process wastewater, follow the path of discharge to concentrated flow (surface waters and/or conduits to groundwater). Keep notes of findings to be converted into inspection reports once back in the office.
- If ongoing discharge is occurring, discuss any immediate actions and/or interim practices necessary to stop the discharge with site representative prior to departure.
- When inspection is complete, follow biosecurity requirements. Disinfect boots or change footwear if planning to conduct additional inspections at other operations.

2. Agricultural Field Inspections

- Initiate inspection by meeting with the landowner, operator, permittee and/or designee. Explain what the inspection will entail, areas to be covered, and the timeline for follow-up communication. Discuss any biosecurity procedures in accordance with manual code.
- Review any necessary paperwork with the landowner, operator, permittee and/or designee. Paperwork may include: nutrient management plans, spreading records, soil/manure sampling results, spill response plan, weather conditions, size of operation and other documentation based on the purpose of the inspection. Discuss calibration and land application methods as well as implementation of restriction setbacks.
- Conduct site walkover playing close attention to areas of potential discharge. These areas may include: concentrated flow channels, tile lines, tile inlets/outlets and breather pipes, grassed waterways, and karst features or other conduits to groundwater. Review

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potential restriction setbacks using a range finder, tape measure and/or shovel or soil probe to field verify setbacks (vertical and horizontal). In addition, review cropping practices and current status of field crops. Evaluate proximity to potential groundwater and surface water receptors in or adjacent to the field(s) of concern. Evidence of prior application events should also be reviewed including manure ponding, runoff, spills, incorporation and soil erosion.

- Document potential discharge areas, groundwater and surface water receptors, land spreading equipment, cropping practices and other items using photographs, water samples and written notes.
- If ongoing discharge is occurring, discuss any immediate actions and/or interim practices necessary to stop the discharge with site representative prior to departure.
- When inspection is complete, follow biosecurity requirements. Disinfect boots or change footwear if planning to conduct additional inspections at other operations.

3. Windshield/Drive-by/Roadside Inspections

- These inspections are conducted from public right-of-way access points or vehicles located in public right-of-way areas and do not necessarily require notification to and/or permission from the landowner, operator, permittee and/or designee.
- View areas of concern either from the vehicle or from public right-of-way access points. If leaving the vehicle, wear appropriate safety equipment (i.e. safety vest) and use hazard lights on vehicle.
- Document items of interest through the use of photographs, water samples and written notes; taking care to remain in public right-of-way access points. Cameras with extended zoom capability are beneficial to document concerns at a distance.
- If site access is needed to verify issue, contact landowner to gain site access permission.

4. Other Areas (neighboring properties, woods, waterways, etc.)

- Initiate inspection by obtaining access permission and meeting with the appropriate entities associated with the areas being inspected. This may be neighboring landowners, impacted residents, and others not directly related to the operation. Depending on the property, ensure appropriate biosecurity procedures are being followed.
- Depending on the purpose of the inspection, conduct any of the following: review any necessary paperwork; evaluate flow paths and areas of concern (i.e. conduits to groundwater); inspect equipment, structures, wells, etc.
- Document items of interest through the use of photographs, water samples and written notes.
- When inspection is complete, follow appropriate biosecurity requirements as needed.

Post-inspection Activities

1. Inspection Documentation & Reporting (file management & records retention)

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- All inspections, field visits, meetings, etc. should be documented in an existing facility file or a new file should be created. Regional staff are the keeper of the official records for WPDES permitted operations and small/medium farms without permits with discharge issues. Official records for grant projects related to the grant documentation are maintained by Community Financial Assistance. However, it is recommended that staff maintain records of these projects in the regions as well.
- Formal file documentation should be completed in a timely fashion. Depending on the season and number of issues staff are dealing with, documentation should be completed within four weeks of initial inspection work.
- File documentation should follow the appropriate program documentation requirements and templates. For WPDES permitted operations, additional documentation in SWAMP may be required and is outlined in the documentation guidance. For DNR cost-shared projects, additional documentation may need to be sent to CFA for inclusion in the official grant file if the documentation is directly related to a grant project.

2. Enforcement

- Appropriate and timely documentation is required for the stepped enforcement process.
- Follow procedures outlined in the Manure and Process Wastewater Enforcement Handbook for programmatic considerations as well as the [[HYPERLINK "http://intranet.dnr.state.wi.us/int/E-Enforcement/environmentalEnforceDocs/EnvironmentalEnforcementHandbook21513.pdf"](http://intranet.dnr.state.wi.us/int/E-Enforcement/environmentalEnforceDocs/EnvironmentalEnforcementHandbook21513.pdf)] for stepped enforcement procedures.
- Contact appropriate statewide program coordinator, environmental enforcement specialist, supervisor, legal attorney, and other program staff as needed when considering elevated enforcement in accordance with procedures outlines in the enforcement handbooks noted above.

Reporting Requirements:

- Employees shall complete an [[HYPERLINK "http://intranet.dnr.state.wi.us/int/at/af/safety"](http://intranet.dnr.state.wi.us/int/at/af/safety)], within 24 hours of a work-related injury or illness and file it with their supervisor.
- Employees shall complete a [[HYPERLINK "http://intranet.dnr.state.wi.us/int/at/af/safety/general%20accident%20report.doc"](http://intranet.dnr.state.wi.us/int/at/af/safety/general%20accident%20report.doc)] to report “near misses” and file it with their supervisor to help others prevent injuries
- Employees shall follow all documentation requirements for site inspections in accordance with the appropriate program documentation requirements and applicable templates.

Employee Certification of Completion:

Once you have read SOP #16 and the applicable related guidance identified in this SOP as well as completed the required safety training elements in each SOP, send your supervisor an e-mail with this statement:

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"I certify that I have read OGL/WQ/WT SOP #16 – Agricultural Compliance Inspections & Complaint Response for Manure and Process Wastewater and applicable related program guidance as well as completed the required safety training in each SOP. I also certify that I have read the Material Safety Data Sheet(s) for the chemicals I will be using as needed to meet the biosecurity manual code. With this message, I have completed the safety requirements and understand the programmatic implementation expectations associated with inspections and documentation procedures."